BOURNS®

Features

- High-inrush current withstand capability
- EIA 0603 (1608 metric) footprint
- AEC-Q200 compliant*
- UL 248-14 listed
- RoHS compliant** and halogen free***

SF-0603HIA-M Series - Automotive Grade High-Inrush SMD Fuses

Clearing Time Characteristics for Series

% of Current Rating	Clearing Time @ 25 °C	
	Min.	Max.
100 %	4 hours	—
200 %	1 second	60 seconds

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES

Electrical Characteristics

Model	Rated Current (A)	Resistance (Ω) Typ.*****	Rated Voltage	Interrupting Rating	Typical I^2t (A^2s) ******	Certifications cUL: E198545
SF-0603HIA100M-2	1.0	0.24	32 VDC	50 A @ 32 VDC	0.082	✓
SF-0603HIA150M-2	1.5	0.115			0.112	✓
SF-0603HIA200M-2	2.0	0.06			0.245	✓
SF-0603HIA300M-2	3.0	0.032			0.74	✓
SF-0603HIA350M-2	3.5	0.022			1.12	✓
SF-0603HIA400M-2	4.0	0.018			2.1	✓
SF-0603HIA450M-2	4.5	0.015			2.68	✓
SF-0603HIA500M-2	5.0	0.013			3.3	✓

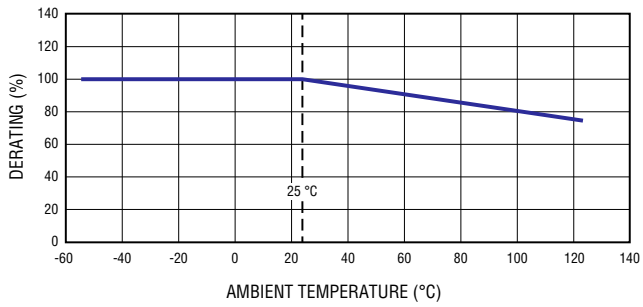
***** Resistance value measured with ≤10 % rated current at 25 °C ambient. Tolerance ± 25 %.
****** Melting I^2t calculated at 1000 % of current rating.

Environmental Characteristics

Operating Temperature	-55 °C to + 125 °C
Storage Conditions	
Temperature	+5 °C to +35 °C
Humidity	40 % to 75 %
Moisture Sensitivity Level	1
ESD Classification[1]	Class 6

[1]per AEC-Q200-2, HBM

Current Rating Thermal Derating Curve



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* Meets Bourns' internal AEC-Q200 equivalent test plan.
** RoHS Directive 2015/863, Mar 31, 2015 and Annex.
*** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

"SinglFuse" is a trademark of Bourns, Inc.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.

Typical Part Marking

Represents total content. Layout may vary.
Markings in green color.

Rated Current	Part Marking
1 A	E
1.5 A	G
2 A	I
3 A	K

Rated Current	Part Marking
3.5 A	L
4 A	M
4.5 A	T
5 A	N

How to Order

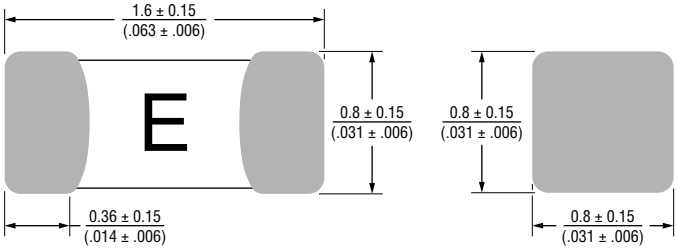
SF - 0603 HI A 100 M - 2

- SinglFuse™ Product Designator
- SMD Footprint
  0603 = EIA 0603 (1608 metric)
- Fuse Blow Type
  HI = High Inrush Current Withstand
- Automotive Grade
- Rated Current
  100 ~ 500 = 1 A ~ 5 A
- Structure Type
  M = Ceramic Multilayer
- Packaging Type
  - 2 = Tape & Reel

Packaging

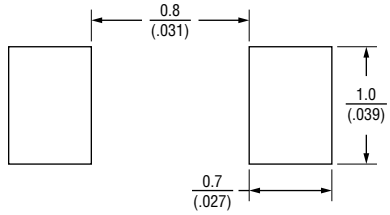
Reel Dimension	7-inch Tape and Reel
Specification	EIA 481-2
Quantity	4,000 pieces
Packaging Code	-2

Product Dimensions



DIMENSIONS: MM / (INCHES)

Recommended Pad Layout



DIMENSIONS: MM / (INCHES)

Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf.